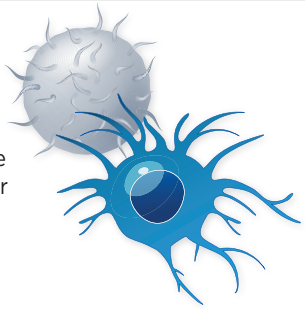
HOW IMMUNOTHERAPEUTICS WORK

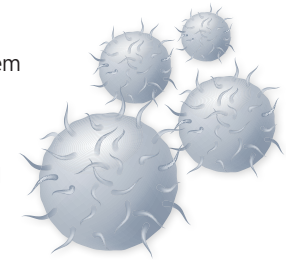
The way in which different immunotherapeutics unleash a patient's immune system to fight cancer varies:

Some release the brakes on the natural cancer-fighting power of the immune system, for example, ipilimumab (Yervoy), durvalumab (Imfinzi), nivolumab (Opdivo), and pembrolizumab (Keytruda).

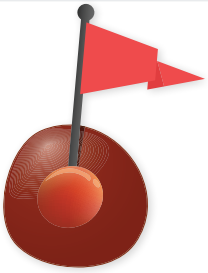
Some enhance the cancer-killing power of the immune system by triggering cancer-fighting T cells; these are called therapeutic cancer vaccines, for example, sipuleucel-T (Provenge).



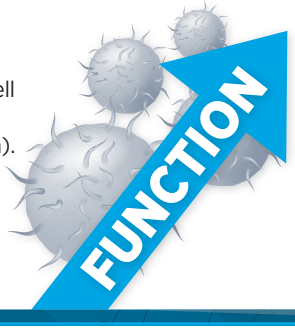
Some amplify the killing power of the immune system by providing more cancer-targeted immune cells called T cells, for example, brexucabtagene autoleucel (Tecartus), axicabtagene ciloleucel (Yescarta) and tisagenlecleucel (Kymriah).



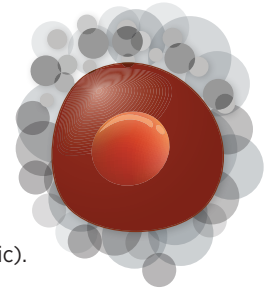
Some flag cancer cells for destruction by the immune system, for example mogamulizumab-kpkc (Poteligeo).



Some increase the killing power of the immune system by enhancing T-cell function, for example, interleukin-2 (Aldesleukin).



Some comprise a virus that preferentially infects and kills cancer cells, releasing molecules that trigger cancer-fighting T cells; these are called oncolytic virotherapeutics, for example, talimogene laherparepvec (T-Vec; Imlygic).



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